

# Two sympatric G-type *Albinaria* species, one of which new to science (Gastropoda: Pulmonata: Clausiliidae)

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A new species of *Albinaria* is described as *A. linnei* spec. nov. At the type locality it occurs sympatrically with *A. adriani*, maybe its sister species. Every single specimen of 52 individuals can be distinguished unequivocally by several character states.

## Introduction

Despite the fact that *Albinaria* Vest, 1867 is the most speciose genus of Clausiliidae, hardly ever more than two and usually only a single species is found at a particular locality. Therefore I initially overlooked the possibility that there is a second *Albinaria* with a G-type clausilial apparatus, once considered diagnostic for *Isabellaria* Vest, 1867, occurring within the range of *A. adriani* (Gittenberger, 1987). When I visited the surroundings of Astros and Aghios Andreas in 1985, 1986 and 1987, only *A. adriani* was found (Gittenberger, 1987). On 5 April 1994 however, on low limestone rocks at Koutroufa, 17 specimens of an unknown species were collected together with 35 shells of *A. adriani*. It remains unclear whether the two species are not only sympatric but also syntopic, since the specimens were collected without knowing that more than a single species was involved. The large numbers of specimens and the constancy of their characters suggest that the shells represent two species indeed.

Not a single *Albinaria* species was known to Linnaeus. Since the genus is exemplary for the complexity of biological systematics and nomenclature however, an *Albinaria* is now named in honour of Carl von Linné, 250 years after the publication of the tenth edition of his founding *Systema Naturae*.

## Systematic part

*Albinaria linnei* spec. nov.  
(figs 1-2)

Material.— Holotype (RMNH 109065) & 16 paratypes (RMNH 109066): Greece, Peloponnisos, Arkadhia, low isolated limestone rocks 4 km SE of Astros at Koutroufa; 20 m alt.; UTM FG5339; E. G. leg., 5.iv.1994.

Shell.— Shell fragile, not decollated, fusiform with an apical part with straight sides; with 8-8¼ whorls. Most of the shell whitish, with some blotches and dots; protoconch



Figs 1, 2. *Albinaria linnei* spec. nov., holotype (RMNH 109065). Greece, Peloponnisos, Arkadhia, low isolated limestone rocks 4 km SE of Astros at Koutroufa; 20 m alt.; UTM FG5339; E. G. leg., 5.iv.1994. Actual height 14.3 mm. Photos J. Goud, Leiden.

and uppermost teleoconch whorl[s] light yellowish brown. Protoconch smooth; teleoconch whorls with many sharp, straight riblets, which are most narrowly spaced in the middle of the shell (about 10/mm) and clearly wider only on the cervical part of the body whorl. Without growth lines in between the riblets. Initial teleoconch whorls moderately convex; lower ones flat and separated by a very narrow, sutural band with slightly indented sutures. Aperture roundish, with a broadly reflected, very fragile peristome, which is damaged in nearly all specimens; upper part of the peristome detached from the penultimate whorl and protruding by c. 0.5 mm. Body whorl with two keels; the dorsal keel is a very prominent bump, at both sides accompanied by an indentation, giving the cervical part a squarish, distorted aspect; the basal keel is far less prominent.

Lamella parietalis low and short, extending for about  $\frac{1}{8}$  whorl into the aperture; without a lamella spiralis. Lamella parallela about  $\frac{1}{2}$  whorl long, starting in front somewhat behind the inner end of the parietalis but rather prominent only near the lunella. Lamella fulcrans prominent, running from the lamella parallela towards the lamella columellaris, which ends further inside the shell than the other lamellae. Lamella columellaris clearly protruding into the aperture from the columellar rim, but quickly lowering further inside the shell. Plica suturalis shorter than the lamella parallela and rather prominent only near the lunella. Upper plica palatalis running from the upper end of the lunella towards the peristome, which is not reached; its anterior part more or less clearly connected with a conspicuous, oblique, white, callous thickening. Lunella situated dorsally; its conspicuously white and high basal part is most prominent, ending next to the subcolumellaris or running across that lamella, blocking off its course. Without a plica basalis running towards the peristome. Clausilium blade  $2\frac{1}{2}$  times longer than broad; with a pointed tip.

Shell height 12.5–15.3 mm (holotype 14.3 mm); width 3.7–4.5 mm (holotype 3.8 mm).

Anatomy.— Unknown.

Differentiation.— *Albinaria linnei* and the sympatric *A. adriani* are similar in the distorted shape of the cervical part of the body whorl and by the presence of a clausilial apparatus which lacks both a lamella spiralis and a plica principalis. *Albinaria adriani* can be distinguished from *A. linnei* by (1) its more widely spaced, blunt to obsolete riblets, (2) the lamella subcolumellaris clearly passing the lower end of the lunella and running much further towards the peristome, (3) a more acutely pointed blade of the clausilium, (4) a less prominently protruding lamella columellaris, and in some specimens the presence of (5) an obsolete lamella spiralis and (6) a vague basalis spur and an equally short plica subclaustralis.

Notes.— Perhaps *Albinaria linnei* and *A. adriani* are sister species, descending from an ancestral *Albinaria* with a prominent dorsal keel, a clausilial apparatus without both a plica principalis and a lamella spiralis, and a fragile shell. A scenario for the mode of speciation remains obscure, however. Apparently there is reproductive isolation, since among 52 *Albinaria* shells collected at the type locality of *A. linnei*, not a single morphologically intermediate specimen that might be of hybrid origin was found.

### References

- Gittenberger, E., 1987. Neue Taxa der sogenannten Gattung *Isabellaria* (Gastropoda Pulmonata: Clausiliidae) vom Peloponnes.— *Basteria* 51: 79-84.

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